CASE OF SUPRACORACOID DISLOCATION OF THE SHOULDER.

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FRIDAY, December 23, the patient a strong, healthy youth, æt. 16 years, was putting on his coat, and having got his right arm into the sleeve was commencing to introduce the left, when the loose sleeve was caught by the "breast strop" of the machinery and quickly twisted round, the right arm being pulled violently in an upward and backward direction, away from the body. A sudden pain was felt in the shoulder at the time, but afterwards the whole arm felt numb; although on touching it, or on his attempting to raise it, there was very acute pain. He was seen an hour after the accident by his own medical man who found the shoulder much swollen and painful. Dislocation was diagnosed, and under chloroform an attempt was made to reduce it, but without success. No crepitus was felt. The bruising and swelling gradually subsided, but at the end of three weeks there was still considerable deformity.

FIG. 1—ANTERIOR ASPECT OF AFFECTED SHOULDER.

On admission to the Infirmary six weeks after the accident, there was a large, hard, slightly irregular, rounded swelling, about a fingers's breadth in front of the right acromion and immediately to the outer

side of the coracoid process. On viewing the shoulder from the front a depression was seen immediately beneath the acromion, and again below this a rounded elevation, apparently due to the closer approximation of the fibres of the deltoid. The bony prominence moved with the shaft of the humerus in flexion, extension, adduction, abduction, circumduction, and rotation, so that there was no doubt of its being the *head* of the bone. The arm could be readily placed against the side of the chest with the hand touching the opposite shoulder. It the scapula was not fixed it moved with the arm, but if fixed, the arm could be moved from the side to an angle of 30′. The tips of the fingers could be placed on the occiput. The arm could be moved anteriorly to an angle of 45′, further movement being limited by the contact of the head of the bone with the acromion. In a backward direction the movement was not limited.

FIG. 2.—LATERAL ASPECT OF AFFECTED SHOULDER.

Rotation outwards was prevented by the head of the bone coming in contact with the acromion. The position of the clavicle and the coracoid process was normal. The supra and infraspinous fossæ were more flattened than on the left side.

Measurements: Circumference, taken by passing a tape under the axilla and over the shoulder was $14^1/_2$ inches, being equal on both sides.

	Right.	Left.
Acromion to int. condyle, - - - -	10 inches.	$11^3/_8$ inches.
Head of humerus to int. condyle, - - -	12 "	12 "

Feb. 2. The patient was fully anæsthetised by means of ether, and reduction was attempted; at first by manipulation, and then by extension downwards, and downwards and backwards; but although considerable force was used no good was effected; hence, with the concurrence of two of his colleagues who happened to be present

Mr. Robson exposed the joint by an incision of $4^1/_2$ inches on the outer side of the shoulder, the incision being convex anteriorly and extending quite down to the bone. It was then discovered that in addition to the dislocation of the head of the humerus there was a longitudinal fracture separating the greater tuberosity from the head and extending down the shaft for some distance beyond the line of incision. On rotating the arm crepitus could be obtained. Reduction could not be effected in consequence of the glenoid fossa being filled with callus and plastic material, thrown out around the fracture. The wound was closed with catgut sutures, and a drainage tube introduced. Salufer "fluo-silicate of soda" dressings were applied.

The tube was removed on the third day and the wound was quite healed on the ninth.

March 17. When seen as an out-patient, he had a good range of movement of the arm. He said that he was quite free from pain and was satisfied that his arm would be as useful as ever. He intended resuming work in a short time.

For the notes of the case I am indebted to my House Surgeon, Mr. Berkeley, G. A. Moynham, M.B. Lond., M.R.C.S. and for the photographs to my friend Mr. H. S. Walker. M.R.C.S., L.R.C.P, Lond.

REMARKS.—That supracoracoid dislocation of the humerus is extremely uncommon is proved by the fact of there being only three cases on record.

In the System of Surgery, by Mr. Holmes, brief mention is made of these cases (p.979,vol.1), one mentioned by Malgaigne, one recorded by Mr. Holmes, (*Med.Chir. Trans*; p. 447, vol. 41) and one by Sir Prescott Hewitt. In Mr. Holmes' and Sir Prescott Hewitt's cases the coracoid process was broken; in Malgaine's the head of the bone rested on the coraco-acromial ligament.

Mr. Pick, in his work on Fractures and Dislocations (p. 371) remarks, "this rare form of dislocation of which, as far as I am aware, only three cases have been recorded, appears to be caused by direct violence applied in an upward direction, and according to Mr. Holmes, can only occur after fracture of the coracoid or acromion process, usually the former."

The case here recorded does not accord with these observa-

tions, since there was certainly neither fracture of the acromion nor coracoid process, nor did the accident appear to be due to direct violence.

That the deformity was really due to supracoracoid dislocation was proved by the dissection undertaken for the purpose of reduction.

FIG. 3—POSTERIOR ASPECT OF AFFECTED SHOULDER

It is interesting to note that the circumference of the shoulder was equal on the two sides, and that the elbow could be made to touch the thorax while the fingers touched the opposite shoulder, since these two signs have been usually looked on as proof of absence of dislocation.

The peculiar fracture is worth noting, for the split was apparently incomplete below, so that although the tuberosity was separated by a fissure of a fourth of an inch, its other relations to the head of the humerus were not disturbed. The photographs taken in three postures serve to show more than any words can describe, and will, I trust, make clear any points left obscure in the notes.